

CLAIMS

1. A locking system for a vacuum cleaner having a top portion and a bottom portion where the bottom portion includes an opening and the locking system is comprised of:

- 5 a shoulder extending from an inside sidewall of the bottom portion;
- a boss protruding from an outside surface of the bottom portion;
- a first locking latch secured to the top portion, the first locking latch adapted to extend into the bottom portion and abut a bottom portion of the shoulder; and
- a second locking latch secured to the top portion, the second locking latch adapted to engage the boss.

2. The locking system of claim 1 wherein the first and second locking latches are integrally molded with the top portion.

3. The locking system of claim 1 wherein the shoulder is integrally molded into the bottom portion of the vacuum cleaner.

4. The locking system of claim 1 wherein the shoulder extends from a sidewall in the bottom portion toward an opposing sidewall.

5. The locking system of claim 1 wherein the first locking latch is of more rigid construction than the construction of the second locking latch.

6. The locking system of claim 1 wherein the first locking latch is substantially planar in shape.

7. The locking system of claim 6 in which the first locking latch is a tab.

8. The locking system of claim 1 wherein the first locking latch is spaced apart from the bottom edge of the top portion.

9. The locking system of claim 1 wherein the second locking latch has a greater length than the first locking latch.

10. The locking system of claim 1 wherein the second locking latch is positioned to engage an outer surface of the boss biasing the second locking latch in a direction away from a sidewall of the bottom portion.

11. The locking system of claim 10 wherein the second locking latch includes an opening adapted to circumscribe the boss, thereby allowing the second locking latch to move toward the sidewall of the bottom portion with the boss aligned with the opening.

12. The locking system of claim 1 wherein the shoulder circumscribes at least a portion of the opening.

13. The locking system of claim 12 wherein the shoulder circumscribes the entire opening.

14. The locking system of claim 1 wherein:

5 a mounting platform is secured to the top portion; and
the first and second locking latches extend from the mounting platform.

15. The locking system of claim 14 wherein the first and second locking latches are integrally molded to the mounting platform.

16. The locking system of claim 14 wherein the first locking latch and the second locking latch are positioned on opposite sides of the mounting platform.

17. The locking system of claim 14 wherein the first and second locking latches are each positioned below a lower edge of the top portion.

18. The locking system of claim 14 wherein the top portion, the bottom portion and the mounting platform are constructed of molded plastic.

19. A method of locking the top portion of a vacuum cleaner to the bottom portion of the vacuum cleaner, the method comprised of the steps of:

aligning the top portion of the vacuum cleaner with the bottom portion of the vacuum cleaner so that a first locking latch secured to the top portion engages a bottom section of a shoulder circumscribing at least a portion of an opening in the bottom portion of the vacuum cleaner; and

latching a second locking latch to a boss extending from an outside surface on the bottom portion of the vacuum cleaner.

20. The method of claim 19 further comprising positioning the top portion of the vacuum cleaner over the entire bottom portion so as to completely cover the opening in the bottom portion of the vacuum.

21. The method of claim 19 further comprising positioning the second locking latch to contact the boss and bias the second locking latch in a direction away from a sidewall of the bottom portion.

22. The method of claim 21 further comprising aligning the boss with an opening defined in the second locking latch.

23. The method of claim 22 further comprising positioning the boss to protrude through the opening and permitting the second locking latch to move toward the sidewall of the bottom portion.